

Don't Let Your Laptop Be a Pain



Don't Let Your Laptop Be a Pain

By Monika Guttman

Don't call your laptop computer a laptop—and don't even think of putting it there. That's the new message from workplace health and safety experts who are responding to an explosion in laptop-computer use—nearly 7 million will be bought this year—and an accompanying explosion in pain, such as a daggerlike feeling between the shoulder blades brought on by hunching over the cramped machines.



The new health idea: Reduce the strain created when a user's neck and shoulders are put at a forward angle and the keyboard sits too close to the body, forcing elbows out to the side. After 30 minutes of use, the all-in-one devices "have a number of sub-optimum conditions that increase neck, back, shoulder, wrist and eye strain," says Bryce Rutter,

Ph.D., CEO of Metaphase Design Group in St. Louis, an ergonomics consultant to Compaq and Microsoft.

Here are expert ways to avoid the perils of portables (aka Laptops):

- "Situate yourself the same way as if at a full computer," says Sherry Saunders of the Center for Office Technology, a manufacturers' and employers' association that promotes computer comfort and offers a 16-page publication called *The Laptop User's Guide*. Recommended posture: Position the portable high enough so there's a balance between the upper arms (arms should hang relaxed from the shoulder; with forearms nearly parallel to the floor) and the neck (the screen should be perpendicular to your line of sight).





● **Increase font size.** This allows you to keep your portable farther away and stretch out your arms. Optimal distance from the screen: 16 to 28 inches (about an arm's length).

● **Use palm or wrist rests.** One arm is 5% or 6% of your total body weight, says Rutter. "A lot of dead weight to hold up without support." But avoid hard wrist rests. "From the wrist to the elbow, there are a lot of nerves, veins and arteries, and if the surface it rests on is too hard, it can give you a tingling sensation in your hands." Maintain a 90-degree angle between the upper arm and forearm.

● **Don't recline.** The more you recline, the more your head and neck are angled forward. So no working in bed.

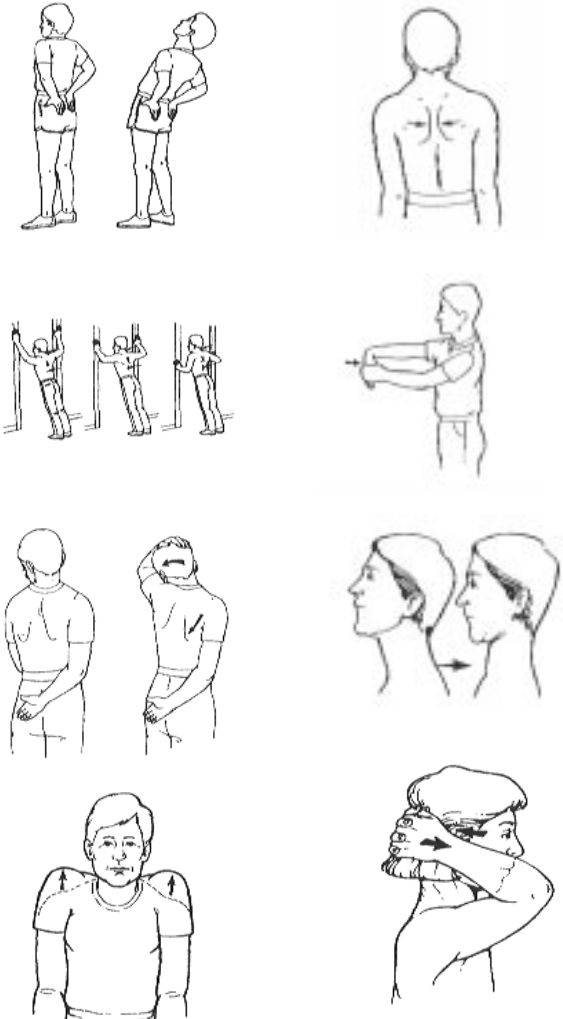
● **Using docking stations with full-size keyboards and monitors when possible.** Second best: Raise laptops off the lap with phone books, towels, pillows—whatever's handy.

● **Keep moving.** Change your position often so the overall load on the muscle-skeleton system is better balanced.

● **Turn down the brightness and contrast.** Glare and contrast from laptop LCD displays lead to eye fatigue. "People tend to crank the contrast way up so the screen appears at its brightest, but then the foreground and background are working off each other," says Rutter. To reduce glare, use shades or angle the display away from overhead lighting. Look up from the screen frequently and focus elsewhere.



Microbreak Exercises



**RehabWorks
O&C, Room 1103
Mail Code Bio-10
Kennedy Space Center, FL 32899
(407) 867-7497
(407) 867-1144 (fax)**

**Web Site
<http://rehabworks.ksc.nasa.gov>**